SERIAL PRESENCE DETECT

		G7 D2		G7 D7		H9 D2		H9 D7	
	Function described	**Function support**	**HEX**	**Function support**	**HEX**	**Function support**	**HEX**	**Function support**	**HEX**
0	CRC Coverage/SPD Device Size/Number of Serial PD Bytes written	116/256/176 Bytes	92	116/256/176 Bytes	92	116/256/176 Bytes	92	116/256/176 Bytes	92
1	SPD Revision	1.0	10	1.0	10	1.0	10	1.0	10
2	DRAM Device Type	DDR3 SDRAM	0B	DDR3 SDRAM	0B	DDR3 SDRAM	0B	DDR3 SDRAM	0B
3	Module Type	Registered DIMM	01	Registered DIMM	01	Registered DIMM	01	Registered DIMM	01
4	SDRAM Density and Banks	8 banks, 2Gb	03	8 banks, 2Gb	03	8 banks, 2Gb	03	8 banks, 2Gb	03
5	SDRAM Addressing(Row/Column)	15 / 11	1A	15 / 11	1A	15 / 11	1A	15 / 11	1A
6	Module Nominal Voltage, VDD	Only 1.5V Operable	00	Only 1.5V Operable	00	Only 1.5V Operable	00	Only 1.5V Operable	00
7	Module Organization (rank / data bit width)	2rank/x4	08	2rank/x4	08	2rank/x4	08	2rank/x4	08
8	Module Memory Bus Width	ECC/ 72bit bus	0B	ECC/ 72bit bus	0B	ECC/ 72bit bus	0B	ECC/ 72bit bus	0B
9	Fine Timebase Dividened and Divisor	5ps / 2	52	5ps / 2	52	5ps / 2	52	5ps / 2	52
10	Medium Timebase Dividened	1ns	01	1ns	01	1ns	01	1ns	01
11	Medium Timebase Divisor	8	08	8	08	8	08	8	08
12	Minimum SDRAM Cycle Time(tCKmin)	1.875ns	0F	1.875ns	0F	1.5ns	0C	1.5ns	0C
13	Reserved	Blank	00	Blank	00	Blank	00	Blank	00
14	SDRAM CAS Latency Supported, Low Byte	6,7,8	1C	6,7,8	1C	6,7,8,9	3C	6,7,8,9	3C
15	~~~~SDRAM CAS Latency Supported, High Byte	Not support over CL=12	00	Not support over CL=12	00	Not support over CL=12	00	Not support over CL=12	00
16	Minimum CAS Latency Time(tAAmin)	13.125 ns	69	13.125 ns	69	13.125ns	69	13.125ns	69
17	Minimum Write Recovery Time(tWRmin)	15ns	78	15ns	78	15ns	78	15ns	78
18	Minimum /RAS to /CAS Delay (tRCDmin)	13.125 ns	69	13.125 ns	69	13.125ns	69	13.125ns	69
19	Minimun Row Active to Row Active Delay (tRRDmin)	7.5ns	3C	7.5ns	3C	6ns	30	6ns	30
20	Minimum Row Precharge Delay Time (tRPmin)	13.125 ns	69	13.125 ns	69	13.125ns	69	13.125ns	69
21	Upper Nibbles for tRAS and tRC	Refer to Byte22,23	11	Refer to Byte22,23	11	Refer to Byte22,23	11	Refer to Byte22,23	11
22	Minimum Active to Precharge Delay Time (tRASmin), Least Significant Byte	37.5 ns	2C	37.5 ns	2C	36ns	20	36ns	20
23	~~~~Minimum Active to Active/Refresh Delay Time (tRCmin), Least Significant Byt	50.625 ns	95	50.625 ns	95	49.125 ns	89	49.125 ns	89
24	Minimum Refresh Recovery Time(tRFCmin), Least Significant Byte	160ns	00	160ns	00	160ns	00	160ns	00
25	~~Minimum Refresh Recovery Time(tRFCmin), Least Significant Byte	160ns	05	160ns	05	160ns	05	160ns	05
26	Minimum Internal Write to Read Command Delay Time(tWTRmin)	7.5ns	3C	7.5ns	3C	7.5ns	3C	7.5ns	3C
27	Minimum Internal Read to Precharge Command Delay Time(tRTPmin)	7.5ns	3C	7.5ns	3C	7.5ns	3C	7.5ns	3C
28	Upper Nibble for tFAW	Refer to Byte29	01	Refer to Byte29	01	Refer to Byte29	00	Refer to Byte29	00
29	~~~~Minimum Four Active Window Delay Time(tFAW), Least Significant Byte	37.5 ns	2C	37.5 ns	2C	30 ns	F0	30 ns	F0
30	SDRAM Output DriverSupported	DLL Off, RZQ/6, RZQ/7	83	DLL Off, RZQ/6, RZQ/7	83	DLL Off, RZQ/6, RZQ/7	83	DLL Off, RZQ/6, RZQ/7	83
31	SDRAM Thermal and Refresh Options	ASR, Normal Temp	05	ASR, Normal Temp	05	ASR, Normal Temp	05	ASR, Normal Temp	05
32	Module Thermal Sensor	TS incorporated	80	TS incorporated	80	TS incorporated	80	TS incorporated	80
33	SDRAM Device Type	DDP	80	DDP	80	DDP	80	DDP	80
34~59	Reserved	Blank	00	Blank	00	Blank	00	Blank	00
60	Module Nominal Height of Unbuffered Dimm	19.4mm	05	19.4mm	05	19.4mm	05	19.4mm	05
61	Module Maximum Thickness of unbuffered DIMM	3~4mm	33	3~4mm	33	3~4mm	33	3~4mm	33
62	Reference Raw Card Used for unbuffered DIMM	rev 0.0 / RC N	0C	rev 0.0 / RC N	0C	rev 0.0 / RC N	0C	rev 0.0 / RC N	0C
63	DIMM Module Attributes	1Row 1Register	05	1Row 1Register	05	1Row 1Register	05	1Row 1Register	05
64	Heat Spreader Solution	Present	80	Present	80	Present	80	Present	80
65	Register Vendor ID (LSB)	Inphi	04	IDT	80	Inphi	04	IDT	80
66	Register Vendor ID (MSB)	Inphi	B3	IDT	B3	Inphi	B3	IDT	B3
67	Register Revision Number	GS-02 LV	11	B	61	GS-02 LV	11	B	61
68	Register Type	SSTE32882	00	SSTE32882	00	SSTE32882	00	SSTE32882	00
69	Register Control Word Function RC1 / RC0	rev 0.0 / RC N	00	rev 0.0 / RC N	00	rev 0.0 / RC N	00	rev 0.0 / RC N	00
70	Register Control Word Function RC 3 / RC 2	rev 0.0 / RC N	A0	rev 0.0 / RC N	A0	rev 0.0 / RC N	A0	rev 0.0 / RC N	A0
71	Register Control Word Function RC 5 / RC 4	rev 0.0 / RC N	55	rev 0.0 / RC N	55	rev 0.0 / RC N	55	rev 0.0 / RC N	55
72	Reserved	Blank	00	Blank	00	Blank	00	Blank	00
73	Reserved	Blank	00	Blank	00	Blank	00	Blank	00
74	Register Control Word Function RC11 / RC10	Inphi 1.5V for RC11	00	IDT 1.5V for RC11	00	Inphi 1.5V for RC11	00	IDT 1.5V for RC11	00
75~116	Reserved	Blank	00	Blank	00	Blank	00	Blank	00
117	Module Manufacturer JEDEC ID Code, Least Significant Byte	Hynix	80	Hynix	80	Hynix	80	Hynix	80
118	~~~~Module Manufacturer JEDEC ID Code, Most Significant Byte	Hynix	AD	Hynix	AD	Hynix	AD	Hynix	AD
119	Module Manufacturing location	Hynix(Ichon)	01	Hynix(Ichon)	01	Hynix(Ichon)	01	Hynix(Ichon)	01
120	Module Manufacturing Data (Year)	Variable	00	Variable	00	Variable	00	Variable	00
121	Module Manufacturing Data (Week)	Variable	00	Variable	00	Variable	00	Variable	00
122~125	Module Serial Number	Undefined	00	Undefined	00	Undefined	00	Undefined	00
126	Cyclical Redundancy Code	CRC cover 0~116 byte	9A	CRC cover 0~116 byte	82	CRC cover 0~116 byte	D8	CRC cover 0~116 byte	C0
127	~~~~Cyclical Redundancy Code	CRC cover 0~116 byte	AC	CRC cover 0~116 byte	92	CRC cover 0~116 byte	05	CRC cover 0~116 byte	3B
128	Manufacture part number (Hynix Memory Module)	H	48	H	48	H	48	H	48
129	~~~~Manufacture part number (Hynix Memory Module)	M	4D	M	4D	M	4D	M	4D
130	Component Group (DDR3 SDRAM)	T	54	T	54	T	54	T	54
131	Component Density	4	34	4	34	4	34	4	34
132	Manufacture part number (Memory Depth)	1	31	1	31	1	31	1	31
133	~~~~Manufacture part number (Memory Depth)	G	47	G	47	G	47	G	47
134	Manufacture part number (Module type)	V	56	V	56	V	56	V	56
135	Manufacture part number (Data width)	7	37	7	37	7	37	7	37
136	Manufacture part number (Die generation)	B	42	B	42	B	42	B	42
137	Manufacture part number (Package Type)	M	4D	M	4D	M	4D	M	4D
138	Manufacture part number (Package Material)	R	52	R	52	R	52	R	52
139	Manufacture part number (Component configuration)	4	34	4	34	4	34	4	34
140	Manufacture part number (Power consumption & Temp.)	C	43	C	43	C	43	C	43
141	Manufacture part number (Hyphen)	-	2D	-	2D	-	2D	-	2D
142	Manufacture part number (Speed)	G	47	G	47	H	48	H	48
143	~~~~Manufacture part number (Speed)	7	37	7	37	9	39	9	39
144	Manufacture part number	Blank	20	Blank	20	Blank	20	Blank	20
145	Manufacture part number	Blank	20	Blank	20	Blank	20	Blank	20
146	Module Revision Code	D	44	D	44	D	44	D	44
147	~~~Module Revision Code	2	32	7	37	2	32	7	37
148	DRAM Manufacturer JEDEC ID Code, Least Significant Byte	Hynix	80	Hynix	80	Hynix	80	Hynix	80
149	~~~~DRAM Manufacturer JEDEC ID Code, Most Significant Byte		AD		AD		AD		AD
150~175	Manufacturer's Specific Data	Blank	00	Blank	00	Blank	00	Blank	00
176~255	Open for customer use	Blank	00	Blank	00	Blank	00	Blank	00